



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09-964,306

09/26/2001

Paily T. Varghese

1662-39600 JMH
(P01-3791)

9914

23505

7590

12/18/2002

CONLEY ROSE, P.C.
P. O. BOX 3267
HOUSTON, TX 77253-3267

EXAMINER

EDWARDS, ANTHONY Q

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/964,306

Applicant(s)

VARGHESE ET AL.

Examiner

Anthony Q. Edwards

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,652,769 to Smith et al. in view of U.S. Patent No. 6,175,503 to Hogan et al. Referring to claim 1, Smith et al. disclose a modular ac section (P.L.C) for a power supply unit having power supply modules (30, 32, 34, 36, 38), comprising a top, i.e., an interface (29), a back (20) adjacent said top, and a circuit breaker (CB1 in FIG. 4A.) attached to said back. See FIGS 2 and 4A and the corresponding specification. Smith et al. does not show a connector, per se, attached to the top wherein the connector mates with a corresponding connector from a power supply module, inserted into the modular power supply unit. Smith et al. does, however, disclose the wiring for connecting the circuit breaker to a "connector" (see FIG. 4A). Likewise, Smith et al. does not disclose a plurality of holes in the top of the modular ac section, in which screws are inserted for attaching the same to the power supply unit. Hogan et al. disclose an ac connector (128) on a top surface (122) of a modular section that mates with a corresponding connector (108) from a power supply module (18), inserted into a modular power supply unit (144). See FIGS. 8, 9 and 11. Likewise, FIG. 12 of Hogan et al. shows a mounting plate (174), which defines the top surface (122) of the ac modular section, along with a plurality of holes for mounting purposes. Therefore, it would have been obvious to one skilled in the art at the time the

Art Unit: 2835

invention was made to modify the modular power supply of Smith et al. to include an ac connector and a plurality of holes on the top surface of the ac section, as taught by Hogan et al., to provide a secure ~~electrical~~ connection between the two modular units.

Referring to claims 2 and 3, Smith et al. in view of Hogan et al. disclose the connector comprising a blind mating connector that is "hot pluggable." See the "Background of the Invention" section of Hogan et al.

Referring to claims 4 and 5, Smith et al. in view of Hogan et al. disclose the modular ac section of claim 1, further including a plurality of connectors attached to said top and adapted to mate with corresponding connectors from power supply modules inserted into the modular power supply unit, wherein the connectors comprise blind mating connectors. See FIGS. 8 and 9 and the corresponding specification.

Referring to claim 6, Smith et al. in view of Hogan et al. disclose a plurality of circuit breakers. See col. 7, lines 41-45 of Smith et al.

Referring to claim 10, Smith et al. in view of Hogan et al. disclose a modular ac section further including a locator post in said top, which mates with a corresponding locator recess in said power supply unit. See the posts 114, 116 and locator recesses 134, 136 of Hogan et al. shown in FIGS. 8 and 9.

Referring to claim 11, Smith et al. in view of Hogan et al. disclose the modular AC section, further including redundant power feeds. Redundant power supply is disclosed throughout both prior art references.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Hogan et al. and further in view of U.S. Patent No. 6,456,203 to Schomaker et al.

Art Unit: 2835

Referring to claim 7, Smith et al. as modified, discloses all of the claimed elements, except for the modular ac section having two ac input connections. FIG. 31 of Schomaker et al. shows two ac input connections (47). It would have been obvious to one skilled in the art at the time the invention was made to further modify the modular power supply of Smith et al. to include two ac input connections, as taught by Schomaker et al., to maximize the power output of the unit.

Referring to claims 8 and 9, Smith et al. as modified, discloses all of the claimed elements, except for the modular ac section having a perforated back to permit air flow to assist in removing heat from said power supply unit. FIG. 1 of Schomaker et al. shows panel structure (1) having perforated sides. Likewise, it is well known in the art that perforated housings or enclosures aid in removing heat from a heat-generating source, such as a power supply unit. It would have been obvious to one skilled in the art at the time the invention was made to further modify the modular power supply of Smith et al. to include a perforated back, as taught by Schomaker et al., to allow air flow to pass through the modular ac section for cooling purposes.

Claims 12-16, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Hogan et al. and further in view of U.S. Patent No. Sato et al. Referring to claim 12, Smith et al. as modified, discloses all of the claimed elements, except for a rack of electrical computer equipment, comprising: a plurality of computers housed in said rack. Sato et al. disclose a casing for computer and computer employing the casing, wherein FIG. 3 shows different combinations of computer equipment to be contained in the rack or casing. It would have been obvious to one skilled in the art at the time the invention was made to further modify the modular power supply of Smith et al. to include a casing or rack system, as taught by Sato et

Art Unit: 2835

al., to reduce the cost of a computer network by allowing for different combinations of functional devices within a single casing or rack.

Referring to claims 13-15, Smith et al. in view of Hogan et al. and further in view of Sato et al. disclose a rack of electrical computer equipment, wherein said connector comprises a blind mating connector, and including a plurality of connectors attached to said top and adapted to mate with corresponding connectors from power supply modules inserted into the power supply housing.

Referring to claim 16, Smith et al. in view of Hogan et al. and further in view of Sato et al. disclose a rack of electrical computer equipment, further including a plurality of circuit breakers.

Referring to claim 21, Smith et al. in view of Hogan et al. and further in view of Sato et al. disclose a rack of electrical computer equipment comprising: a plurality of computers housed in said rack; a power supply unit housed in said rack and providing power to said computers, said power supply unit includes a power supply housing mated to said rack in which a power supply module can be inserted and a modular means for interconnecting AC input power to a power supply module.

Referring to claim 22, Smith et al. in view of Hogan et al. and further in view of Sato et al. disclose a rack of electrical computer equipment, wherein said modular means is screwed to said power supply housing. See FIG.11 of Hogan et al., wherein screw holes (not numbered) are provided in the power supply housing (144) and, thus, would allow for such mating.

Referring to claim 23, Smith et al. in view of Hogan et al. and further in view of Sato et al. disclose a rack of electrical computer equipment, wherein said modular means comprises

Art Unit: 2835

redundant power feeds. Redundant power supply, and thus redundant power feeds, is disclosed throughout the aforementioned prior art references.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Hogan et al. and further in view of Sato et al., and still further in view of Schomaker et al. Referring to claim 17, Smith et al., as modified by Hogan et al. and Sato et al., disclose all of the claimed elements, except for the claimed rack of electrical computer equipment having two ac input connections. FIG. 31 of Schomaker et al. shows two ac input connections (47). It would have been obvious to one skilled in the art at the time the invention was made to further modify the rack of electrical equipment with modular power supply of Smith et al. v. Hogan et al. v. Sato et al. to include two ac input connections, as taught by Schomaker et al., to maximize the power output of the unit so that more than one ac input connection is available when required.

Referring to claims 18 and 19, Smith et al., as modified by Hogan et al. and Sato et al. and by Schomaker et al., disclose a rack of electrical computer equipment, wherein said the back is perforated to permit air flow to assist in removing heat from said power supply unit.

Referring to 20, Smith et al., as modified by Hogan et al. and Sato et al. and by Schomaker et al., disclose a rack of electrical computer equipment, wherein the rack includes power feeds.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,973,947.

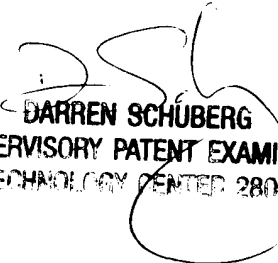
Art Unit: 2835

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 703-605-4214. The examiner can normally be reached on M-F (8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (703) 308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 306-5511 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-9929.

aqe
December 13, 2002


DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800